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ABSTRACT

Job satisfaction in mental health organizations has been a neglected research topic, in spite of the fact that mental health organizations themselves are concerned with quality of life issues. To study job satisfaction at three long-term public psychiatric hospitals, the Job Satisfaction Index was administered to 44 direct service employees. In general, employees who were most satisfied: (1) worked in a decentralized hospital differentiated by a unit-program structure; (2) had professional job titles; (3) were over age 45; (4) were neither high nor low in education level; and (5) had been employed at the hospital either less than 4 or more than 10 years. Residents' change toward discharge readiness also raised satisfaction with work and co-workers. The findings suggest a need for further exploration of the relationship between job satisfaction and hospital organization structure. (Author/JAC)

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DIAGNOSING JOB SATISFACTION IN MENTAL HEALTH INSTITUTIONS

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Diagnosing Job Satisfaction in Mental Health Institutions

Job satisfaction in mental health organizations has been a neglected subject. In 1974, Sarata claimed that he was able to identify only twenty empirical studies of job satisfaction in human services, and a majority of these were limited to nursing personnel. Since that time, only a few additional studies have been undertaken (e.g. Sarata, 1974; Porter, Steers, Mowday, & Boulian, 1974; Folkins, O'Reilly, Roberts, & Miller, 1977; Sarason, 1977; Sarata & Jeppesen, 1977; and Boo, Kim, & Wheeler, 1978). This lack of interest is surprising since mental health organizations themselves are concerned with quality of life issues (Dehlinger & Perlman, 1978). Because of the limited amount of research on job satisfaction in mental health, the results of studies conducted in profit making enterprises are often directly applied to mental health settings. As Maloof (1975) argues, such transference of industry's "efficiency technology" has not achieved improved productivity and increased job satisfaction in human services bureaucracies.

Scholom and Perlman (1976) refer to mental health workers as "the forgotten staff;" and they go on to hypothesize that the "quality of mental health service delivery is limited by a lack of the system's responsiveness to the providers of such service." Likewise, mental health employees may neglect their own needs since mental health values emphasize client service as the source of gratification, and therefore they may not advocate for their own needs as members of organizations.

The mental health organization is frequently viewed as a setting which, at best, can provide unobtrusive conditions for profesional practice but often adds frustrations or impediments to effective patient care practices. Many mental health workers are active advocates for their clients, but are poor advocates for themselves.

Future research on job satisfaction in mental health organizations must be supported by the development of an instrument to reliably and validly measure job satisfaction in mental health, an instrument which will build an understanding of the ways in which job satisfaction is associated with key staff characteristics and patient functioning indicators. The present study undertook the development and assessment of such an instrument in long-term residential psychiatric institutions. In addition, this instrument was used to determine the relationship between job satisfaction and staff characteristics such as type and size of unit and patient characteristics such as level of functioning.

Definition and Measurement

Differing approaches to the measurement of job satisfaction have partially been responsible for contradictory results in many previous research studies. But the issues go deeper than the mere operationalization of the concept. Job satisfaction is an ambiguous concept. It has been variously viewed as a feeling, a mood, an orientation, a perception, an attitude, and a need/drive response. It has been described as a unitary, bimodal, and multidimensional concept that may be either a

dependent or independent variable in research. As a result, much of the current research lacks theoretical consistency and results are conflicting (Schwab and Cummings, 1971). Thus, as a starting point, it is essential that there be a clear analytical statement clarifying the meaning of job satisfaction.

The authors are in agreement with Price (1972:156) who defines satisfaction as the "degree to which the members of a social system have a positive affective orientation toward membership in the system. Members who have a positive affective orientation are satisfied, whereas members who have a negative affective orientation are dissatisfied." This definition places satisfaction and dissatisfaction at the extremes of a single continuum, but allows for the existence of several different dimensions of job satisfaction.

The Job Descriptive Index (JDI) developed at Cornell University by Smith, Kendall, and Hulin (1969) is the most widely used and acclaimed measure of job satisfaction (Vroom, 1964; Price, 1972; and Robinson, Athanasiou, & Head, 1973). The JDI is concrete, asking respondents to be descriptive about aspects of their jobs, and it does not require complex abstractions. The JDI is easily administered and quickly scored. Through extensive reliability and validity testing, the JDI has been found to be empirically well-grounded.

A derivative of the JDI was developed by the authors. The modified instrument was called the Job Satisfaction Index (JSI).

The Job Satisfaction Index

The original JDI uses an adjective checklist format with responses being either "yes," "no" and "?". The JDI has five subscales which measure dimensions of satisfaction: Work on Present Job, Present Pay, Opportunities for Promotion, Supervision on Present Job, and People on Your Present Job. The scale is based on the assumption that if respondents use positive adjectives to describe these dimensions, then they will produce scores indicative of satisfaction. If negative adjectives are responded to in the affirmative, then low satisfaction or dissatisfaction scores result. Satisfaction and dissatisfaction are polar extremes on a continuum.

Modification of the original JDI was necessary for two reasons. First, it was developed in industrial settings, so some of the adjective were not appropriate to a public mental health setting. Also, some items were thought to have little or no variability under Civil Service conditions. Second, we wanted to increase the precision of measurement and the variability of responses in hopes of identifying significant differences among hospital wards. We therefore adopted a Likert scale format for responses. Anchors for the five response categories were Not at All, A Little, Somewhat, Very Much, and Completely.

The Job Satisfaction Index was first administered to 44 employees of a State operated psychiatric receiving hospital in Ohio. The hospital was located in a major metropolitan area but served a large district. Only direct care staff were included in the sample. These persons included aides and nurses assigned to four wards, psychiatrists, social workers, psychologists, and activity therapists who were not specifically attached to any one ward. Two of the wards were acute care admitting wards and two were long-term treatment wards used for stabilized patients. These wards were again divided by the sex of the patients. The four wards, which were the units of analysis for the Ohio study, constituted the population of all wards in the facility.

After this administration of the Job Satisfaction Index, modifications were made and the Index was re-analyzed on the basis of responses from 297 ward assigned direct care employees in three long-term psychiatric hospitals in Ohio. The response rate for this sample was 98%.

Reliability Results

Initial reliability estimates were strong, reflecting the careful development of the original instrument by Smith and her colleagues. Our results suggested that the revisions made did improve the reliability of the instrument to an important extent.

Split-half correlation coefficients were calculated for each of the five job satisfaction index scales. The zero order split-half Pearson

correlations were moderately high and were comparable to those reported by Smith for the JDI (Smith et al., 1969). The one exception was the Promotion scale which had a .48 zero order split-half correlation. Having only nine items and a sample size of 44, this finding warranted further testing.

Split-half correlations were corrected by the Spearman-Brown formula for estimating reliability. The effect was to increase the strength of the correlations by considering the number of scale items. The Promotions scale then achieved a corrected reliability coefficient of .65. The maximum size split-half corrected coefficient was found to be .95 for the Supervision scale.

Cronbach's alpha was also calculated for each scale. Cronbach's alpha is a measure of scale internal consistency based on all inter-item correlations and considers the number of scale items (Cronbach, 1951). Even though a more stringent measure, Cronbach's alpha produced correlations of greater strength than did the split-half method. Based on this result, excellent reliability on all JSI scales could be claimed.

Insert Table 1 about here

Evaluation of the strength of individual items in the JSI scales was carried out by calculating item-total and inter-item correlation coefficients for each scale. The item-total correlations were found to

vary from a low of .27 to a high of .85. Several weak inter-item correlations were found. Those items which did not achieve a .50 or better item-total correlation were either modified to be less abstract or were replaced. In this way, the size of the original Job Descriptive Index was retained. Seventeen (17) items were modified.

The revised JSI was then administered to the sample of 297 employees of three long-term care psychiatric residential facilities. The reliability statistics, presented in Table 2 below, show improvement over results derived from the first draft of the JSI. These reliability estimates are higher, in all but the Promotions scale, than those reported by Smith (1969) for the Job Descriptive Index.

Insert Table 2 about here

Relationship of the JSI Scales

The Job Satisfaction Index is based on the theoretical assumption that job satisfaction is a complex variable that can be measured for different referents. There is considerable agreement that the most significant aspects of job satisfaction are the five elements contained in the Job Satisfaction Index. The justification for measuring these five elements on separate scales is that they are independent factors which cannot legitimately be added together. If this were not the case, then job satisfaction could be measured on one general scale.

To check this, the intercorrelations of the JSI scales were examined. Initial results, based on the sample of 44 receiving hospital employees, showed a pattern of either non-significant or weak correlations among the scales. This supported a hypothesis of independence. When the same scale intercorrelations were produced using a sample of 297 employees of long-term psychiatric hospitals, the pattern of intercorrelations was somewhat different, but none of the intercorrelations were larger than .50.

Insert Tables 3 and 4 about here

Robinson, Athansiou, and Head (1973) criticized the Job Descriptive Index on the basis that the scales are not independent and tap some general job satisfaction factor. Smith et al. (1969) claim opposite results. Our findings suggest that the five job satisfaction scales may be related, but not sufficiently to justify pooling the five scales into one scale. Our findings show that there is a pattern of interrelationships but further empirical work is needed to theoretically explain how different job satisfaction referents interact. Work in this regard has begun. Oldham, Hackman, and Stepina (1978) in their job design research have recently shifted their focus by positing that "context satisfactions," such as Pay and Promotions, moderate the effect of job design variables on satisfaction with the Work Itself.

Validity of the JSI

One of the strengths of the Job Satisfaction Index is its attractive face validity. The focus on five referents for job satisfaction correspond with the perceptions of many observers. The referents require inferences which are value-based to derive an assumed level of satisfaction from the descriptions. This method has the advantage of not requiring complex judgment by respondents about their feelings. On the other hand, values may differ among respondents, or they may shift over time. If this is indeed true, then validity may vary by the respondent or group of respondents, and may change over time. Our analysis has revealed few such disagreements among respondents.

Overall validity was further supported by the Quartimax factor analysis of the JSI. Our analysis confirmed the soundness of four of the five JSI scales, but the Pay scale loaded on all five factors. This would suggest that satisfaction with pay is bound up in other aspects of people's jobs, perhaps both as a cause and as an effect, but not as an independent factor. Low satisfaction with pay may seriously reduce the attitudes or feelings of employees toward otherwise meaningful jobs. High satisfaction with pay may help make otherwise unsatisfying jobs more tolerable.

The JSI did reflect the different levels of satisfaction that were predicted for the four ward-based respondent groups and the unassigned

employees in the Ohio receiving hospital. Since the unassigned employees were psychiatrists, social workers, psychologists and activity therapists, we postulated that their Satisfaction with Pay, Promotions, and the Work Itself would be greater than ward assigned nurses and aides. This direction was affirmed although the difference was not significant.

The two longer-term treatment wards ranked lowest in overall satisfaction while the two receiving wards, which were thought to be more interesting places of work, ranked higher. This relationship held for the scale Satisfaction with the Work Itself. Thus, the measurement corresponded to our understanding of ward differences. The researchers' judgment of differences in Satisfaction with the Work Itself among the wards of long-term psychiatric hospitals were also confirmed by JSI scores in that intake and admission wards showed higher scores.

The Relationship Between Job Satisfaction and Staff Characteristics

To gain an understanding of differences in job satisfaction among the employees of the three hospitals, several two-way ANOVA were computed. Each used different staff demographic characteristics with the hospital of employment as the independent variable, and the scores of the five job satisfaction scales as the dependent variables. In this way, it was possible to determine whether employees differed in job satisfaction due to demographic features, to the hospital in which they worked, or as a result of the interaction of both.

The demographic characteristics selected for analysis were: job title, years of hospital employment, sex, age, academic degree attained, and union membership status. Additional analyses were carried out to find any differences in job satisfaction that related to the type of unit in which the employee worked (e.g., geriatric, transitional, acute care, chronic, or secure units). Also, the effect of level of functioning of residents upon job satisfaction of employees was considered.

Before results of these analyses are discussed, some general observations about the overall pattern are required. Table 5 represents the mean score on each scale for the JSI for each hospital.

Insert Table 5 about here

One-way analyses of variance of the five JSI scales by hospital showed differences to be significant in all but the Opportunities for Promotion scale.

Note that the Pay and Promotion scales received much lower ratings than the other three scales. Also, Satisfaction with Co-Workers is uniformly high at all three sites. The differences of mean scores among the five JSI scales were significant using a one-way ANOVA, $F(4,105)=104.7?$, $p < .00$. These differences were found between all the scales with the

exception of findings for the Work and Supervision scales. Using a Student-Newman-Keuls multiple range test differences between those two scales were not found to be significant ($p < .05$). Thus, the Work and Supervision scales seem to be the most logical scales for differentiating between hospital and units. As noted in Table 4, these two scales are significantly correlated.

Insert Table 6 about here

Results of the study concerning the relationship of the JSI to staff demographics revealed that job titles of employees had no significant relationship with Satisfaction with Pay, Promotion opportunities, or with Co-Workers. Furthermore, no significant differences on these scales were found between the three hospitals, nor in the interaction of job title and hospital. Thus, regardless of job title of employees or the hospital of employment, there is a consistency in the level of dissatisfaction with Pay and Promotion opportunities. Likewise, the relatively high satisfaction with co-workers has uniformity across these variables.

The relationship between employees' job titles and Satisfaction with the Work Itself was significant, $F(7, 274)=2.14$, $p < .05$. Aides and attendants, psychologists, registered nurses, and RN supervisors had the lower ratings on work satisfaction. Psychologists were the lowest.

These results differed significantly between hospitals, $F(2, 247)=6.04$, $p < .01$. Hospital 1 exhibited lower ratings than did the other two hospitals in this case. The interaction effect of hospital and job titles on Satisfaction with the Work Itself was not significant, which suggests a consistent pattern in the three hospitals in the association between an employee's positional title and his/her relative satisfaction with work.

Comparable results were found when examining the relationships among job titles, hospitals and satisfaction with supervision. The relationship of job titles to Satisfaction with Supervision was significant, $F(7, 274)=3.10$, $p < .01$. Unit managers obtained a low score, followed by RNs, RN supervisors, aides, attendants, and activity therapists. Social workers reported higher satisfaction with supervision, and were followed by LPNs, mental health workers, psychologists, and physicians. The overall differences among the three hospitals were significant, $F(2, 247)=12.81$, $p < .001$, and there was a significant interaction effect between hospital and job title on Satisfaction with Supervision. In Hospital 1, scores on this scale were lowest. The significant interaction effect suggests that it does make a difference in how job titles may relate to Satisfaction with Supervision due to the hospital in which the person is employed.

The question was posed: Does it make any difference if the number of years of employment at a hospital is considered? Interestingly, this was not a significant factor in job satisfaction, with the exception of

Satisfaction with Supervision, $F(5, 253)=2.53$, $p < .05$. Those employees who were in the middle ranges, and had worked for the hospital for between 4 and 10 years, had lower Satisfaction with Supervision than did either the newer or the long-term employees.

There is no effect upon any JSI scales due to sex of the respondent. One interesting interaction does appear on the Pay dimension, $F(2, 265)=3.28$, $p < .05$. Women at Hospital 1 expressed more dissatisfaction with pay. This result is consistent with the observation that there are a disproportionate number of women who hold either aide or attendant jobs, which are the lowest paid positions.

With respect to the age of the employee, there is a significant relationship with Satisfaction with the Work Itself. $F(4, 253)=3.47$, $p < .01$. The younger workers, those under the age of 45, rate the work as less satisfying than their older colleagues.

The academic or professional degree held by the respondent has an effect on two scales of the JSI, Supervision and Co-Workers. For Supervision, the main effects of hospital, $F(2, 246)=5.58$, $p < .01$, and degree $F(7, 245)=2.68$, $p < .01$, and the interaction, $F(13, 245)=2.87$, $p < .001$, are significant. Employees at Hospital 1 rated their Satisfaction with Supervision lower than that at the other hospitals. Those with less than a high school degree, as well as RNs and Ph.D.s, showed lower Satisfaction with Supervision. The significant interaction indicates

that the effect is different from hospital to hospital.

Those employees who hold some advanced degree rate their Co-Workers less favorably than those who hold an associate degree or less, $F(7, 245) = 2.06$, $p < .05$. Employees at Hospital 1 rate their Co-Workers less favorably than employees at the other two sites, $F(2, 245) = 6.27$, $p < .01$.

Another staff characteristic that might be related to job satisfaction is union membership. Examination of the distribution of union membership by job title revealed that only a small percentage of physicians, psychologists, social workers, or RNs belonged to a union. A substantial proportion of aides, attendants, LPNs and mental health technicians reported union membership. The analysis of the relationship of job satisfaction to union membership was confined to these two latter categories. A two-way ANOVA was run with Union-Non union as one factor, and Hospital as the other. No significant main effect was found on any scale of JSI for the Union variable.

The Relationship of the JSI and Unit-Patient Characteristics

The previous discussion has focused on staff demographic characteristics and their relationship to the scales on the JSI. Two different variables were analyzed that perhaps deal more directly with working conditions encountered by staff members. These variables are 'type of unit' and 'functional level of residents' on the unit.

Functional levels of the residents were assessed in three ways. First, wards were categorized on the basis of researchers' observations after talking with ward employees and residents. Four levels, ranging from low to high were used. To supplement this gross measure, two standardized measurement instruments were used. The Discharged Readiness Inventory (Hogarty and Ulrich, 197?) is indicative of potential for discharge.

Score A of the DRI is an index of pathology, and the DRI's CAP score reflects Community Adjustment Potential. The Nurses Observation Scale for Inpatient Evaluation (Honigfeld, Gillis and Klett, 1966) is an indicator of on-ward behavior. Both were administered by ward personnel shortly after a resident was admitted to the ward and then again at the time the resident left the ward. Residents not leaving the ward were rated at the completion of the three month research study. The difference between ratings at entry (Time 1) and leaving the ward (Time 2) was used as the indicator of change in resident functioning.

One-way ANOVA's were calculated for each of the variables for the scales of the JSI. The finding was that type of unit had no effect on any scale of the JSI. However, the functional level of the residents indicated significant effects on Satisfaction with Work, $F(3, 18)=3.49$, $p < .05$, Pay, $F(3, 18)=4.10$, $p < .05$, and Opportunities for Promotion, $f(3, 18)=3.71$, $p < .05$. The direction of the difference, as expected,

showed that employees who worked with low-functioning residents experienced less satisfaction. Surprisingly, employees who worked with high-functioning residents were not always the most satisfied. Those who worked with residents whose functional level was rated as medium showed consistenly higher ratings on the satisfaction scales.

The finding that Satisfaction with Pay is related to functional levels of residents is an interesting one. It is the only variable found at this point to have a direct effect on the Pay dimension. Even though the Work and Pay dimensions are not highly correlated, this finding suggests that if Satisfaction with the Work Itself is low enough, it adds to a dissatisfaction with Pay. This is not consistent with the views of those who suggest that intrinsic satisfactions are separate from extrinsic satisfactions (Herzberg, Mausner, Peterson, and Capwell, 1957). More specifically, if intrinsic satisfiers are at the low end of the continuum, then extrinsic factors are indeed affected.

The question "Is employee job satisfaction really related to patient functioning, or is this relationship only an artifact of other ward characteristics?" begged an answer. Typically, wards that house low-functioning residents had fewer staff and in some cases, a large number of residents. This suggests that job satisfaction may not be related to patient functioning, but to ward characteristics. The JSI subscales were correlated with two ward characteristics: number of residents, and staff-patient ratio. The correlations were all rela-

tively small and none were significant. Thus, it appeared that the relationship of the JSI to patient functioning was a direct one and not mediated by some other characteristics of the ward.

For the 22 wards studied, the average score from the NOSIE, and two scores derived from the DRI, Score A and CAP, were correlated with the mean JSI score for that unit. The rating on patients had been taken on two occasions--at intake and again at discharge. The JSI measures on staff were collected about halfway through this period. Score A of the DRI is an index of pathology. A high score indicates greater pathology. Score A (Time 1) and the first four scales of the JSI were significantly correlated. The correlations ranged from a low of -.39 to a high of -.48. The level of significance was $p < .05$. Only the co-workers subscale was not related to Score A. No relationship was found between the CAP scores at Time 1 and any scale of the JSI. The CAP score is an indicator of Community Adjustment Potential.

The NOSIE Total Scale, a measure of on-ward behavior, showed a significant correlation with the Work scale, $r=.44$, $p<.05$, Pay scale, $r=.37$, $p<.05$, and the Promotion scale, $r=.38$, $p<.05$. Note that these correlations are of comparable magnitude to those between Score A and the JSI. The NOSIE (Time 1) and DRI scores measured the functioning of the patient soon after entry to the ward. The correlations between JSI and these scores confirm the relationship of level of patient functioning to job satisfaction.

Measures of patient functioning were also collected at discharge or at the end of the study. Thus, we have a measure of change or improvement in functioning. Correlation between the JSI scales and the change score on the NOSIE, DRI Score A, and CAP were examined. There was no relationship between the change score of the DRI score A on any scale of the JSI.

However, for both the NOSIE and the CAP score, significant correlations were obtained. Both the Work scale, $r=.68$, $p < .001$, and the Supervision scale, $r=.57$, $p < .01$, were related to the NOSIE score at Time 2. Note that these correlations are substanially higher than the correlations of the JSI with the NOSIE scores upon entry. One might speculate that while the level of patient functioning at intake has an effect, the possibility of improvement exerts a more powerful influence on the job satisfaction.

This speculation receives support from the relationship of the CAP difference score to the JSI. Again, the Work scale, $r=.38$, $p < .05$, and the Supervision scale, $r=.52$, $p < .01$, show significant relationships to the CAP change score. This result was interesting when one considers that no relationship was found at Time 1. This might indicate that staff members change opinions from satisfaction with improvement in onward behavior to a concern for behaviors that indicate potential for a positive adjustment in the community after discharge.

Discussion

Our analysis revealed that the JSI detected significant differences in job satisfactions among the three hospitals. Job Satisfaction was consistently lowest in the hospital that was organized around traditional departmental structures, while the highest job satisfaction was found in a hospital using a unitized structure in which wards functioned much like separate programs, each with a director and ward-assigned employees. A third hospital, which employed both departmental organization and unit-based structure, fell into the middle range on the job satisfaction variable. This association between hospital organization structure and job satisfaction is speculative.

Although a subject for future research, there is a growing body of theory to support such an association. (Cummings and Berger, 1975; Holland, 1973). Several organizational researchers argue that job satisfaction is causally related to dimensions such as (1) variety in work activities; (2) employee identification with ward goals and methods; (3) responsibility for completion of an entire job rather than involvement in only specialized aspects of patient care; and (4) employee consideration of a position as significant and meaningful (Oldham, Hackman, and Stepina, 1978; Passmore, 1978; Sarata and Jeppesen, 1977). Unitized hospital structures are likely to promote dimensions such as these.

The finding that low satisfaction with pay levels and promotional opportunities inversely correlates with high satisfaciton with co-

workers is consistent with the findings of Brown (1978) regarding hierarchical interfaces among groups in power conflict. Salaries and promotions are determined by persons or groups who are not easily influenced by ward-assigned employees. A distant Civil Service system may readily become the external enemy and may lead to co-worker, in-group cohesiveness against the threat. The finding that union membership had no significant effect on job satisfaction would suggest that the union has not been an effective link between employee frustrations about pay and promotional opportunities and the top levels of the mental health system.

Findings related to job satisfaction differences by employee job title suggest that hospital planners should focus further attention on these target groups. The low scores obtained by aides and attendants satisfaction with work is not surprising. However, corrective efforts to enrich their jobs have continued to wane. Special issues of concern to psychologists, who are a small group in a host setting, deserves remedial attention. Significant differences between hospitals were found on this dimension.

It might be speculated that in the departmentally decentralized hospital, which is heavily dependent on formal rules, the psychologist might be most dissatisfied. Conversely, a psychologist who practices in the unitized hospital which permits greater autonomy, might be more satisfied with a work environment that is consistent with professional values (Epstein, 1970; Bennett and Hokenstad, 1973; Larson, 1977).

Registered nurses and RN supervisors scored low on both the Work Itself scale and on Satisfaction with Supervision. Most RN nurses are in positions of some responsibility on the wards. Therefore, planners should be concerned that negative attitudes could set the tone for entire wards. Since RN jobs include ward leadership activities, supportive relationships with supervisors are vital to good morale and energetic performance.

The tendency for younger workers to view their work as less satisfying than older workers is consistent with other research regarding the highly correlated variables of job satisfaction and turnover rates (Mobley, Homer, and Hollingsworth, 1978).

One of the most provocative findings from this study was the association between employee job satisfaction and the level of functioning of the ward residents. Employees who work with residents who function at intermediate levels demonstrated the highest satisfaction on the three dimensions of the Work Itself, Pay, and Opportunities for Promotion. The curvilinear relationships with level of resident functioning was unexpected and is not consistent with the common belief that mental health professionals prefer to work with higher functioning clientele.

A possible explanation for this result is that higher functioning residents who live in custodial settings present the staff with issues,

needs and behaviors which are difficult to respond to in an institutional setting. Higher functioning residents may be difficult to control or satisfy, while the lowest functioning residents may demonstrate opposite behaviors, leading to apathetic, unstimulated ward employees. If this result is affirmed by subsequent research, the common practice of matching residents in homogeneous wards should be evaluated. Wards that combine several functional levels may prove to be optimal, at least on the Satisfaction with the Work Itself dimension. Our results also suggest that while increasing the staff-to-patient ratio may be desirable for other reasons, doing this will not, in itself, affect employee job satisfaction.

Satisfaction with Pay and Promotional opportunities are considered to be context or extrinsic areas not directly related to Satisfaction with the Work Itself, a content or intrinsic dimension (Herzberg, Mausner, Peterson, and Capwell, 1975). The finding that Pay and Opportunities for Promotions was related to patient functioning levels supports the unidimensional view of job satisfaction. This view states that both intrinsic and extrinsic rewards affect all aspects of job satisfaction. It appears that if employees are not satisfied with pay, then dissatisfactions in other aspects of their work will augment the unhappiness with pay.

Results also indicated that a significant relationship existed between the on-ward behavior of residents and employee job satisfaction. Measures of degree of pathology and on-ward behavior of residents at the

time of intake were significantly related to all JSI scales with the exception of Satisfaction with Co-Workers. Yet, job satisfaction was unaffected by reduction in residents' pathology over time. It was, however, affected by improvement in on-ward behavior and by progress in the direction of discharge readiness. The direction of this relationship requires further investigation.

One interpretation of these results is that psychiatric employees are initially negatively affected by evidence of severe pathology in residents, but later can look beyond pathological symptomatology to the progress which the resident is making in self-care, interpersonal relationships, and elements that contribute to community adjustment. Seeing this progress may affect Satisfaction with Work and with Supervision. It is also possible that changes in employee satisfaction may lead to performance differences that impact resident progress. There is likely a circular relationship, and future researchers will need to explore non-recursive models to explain the relationship between job satisfaction and client outcomes.

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Table 1

Split-Half Correlations

Spearman-Brown Corrected Reliability Estimates

and

Cronbach's Alpha

for

Five Scales of the Job Satisfaction Index (First Draft)

Scale	Split-Half Correlations	Spearman-Brown Corrected Estimates	Alpha
Work	.74	.85	.91
Pay	.60	.75	.83
Supervision	.90	.95	.91
Promotions	.48	.65	.83
Co-Workers	.80	.89	.90

N = 44

Table 2

Split-Half Correlations

Spearman-Brown Corrected Reliability Estimates

and

Chronbach's Alpha

for

Five Scales of the Job Satisfaction Index (Final Form)

Scale	Split-Half Correlations	Spearman-Brown Corrected Estimates	Alpha
Work	.82	.90	.91
Pay	.72	.84	.84
Supervision	.85	.92	.90
Promotions	.69	.81	.84
Co-Workers	.84	.91	.92

N = 297

Table 3

Correlations

of the

Job Satisfaction Index Scales

	Work	Pay	Supervision	Promotions
Pay	.42**			
Supervision	.16	-.16		
Promotions	.45***	.20	-.11	
Co-Workers	.14	.08	.23	.27*

N = 44 *p < .05
**p < .01
***p < .001

Table 4

Correlations

of the

Job Satisfaction Index Scales

	Work	Pay	Supervision	Promotions
Pay	.22***			
Supervision	.44***	.07		
Promotions	.40***	.44***	.22***	
Co-Workers	.29***	-.02	.30***	.12*

N = 297

*p < .05

***p < .001

Table 5

Mean Job Satisfaction Index Scores

by Hospital

Hospital #	Work	Pay	Supervision	Promotions	Co-Workers
1	3.04	2.01	3.46	2.30	3.76
2	3.29	2.50	3.35	2.46	3.97
3	3.40	2.17	3.65	2.53	3.96

Note. Maximum Mean Score = 5.00
Minimum Mean Score = 1.00

Table 6

Results of One-Way ANOVA

by

Hospital

Scale	Result
Work Itself	$F(2,268) = 7.395$, $p < .001$
Pay Scale	$F(2,268) = 9.431$, $p < .001$
Supervision Scale	$F(2.268) = 10.453$, $p < .001$
Promotional Opportunities	$F(2,268) = 2.437$, ns
Co-Worker Scale	$F(2,268) = 3.865$, $p < .05$

JOB SATISFACTION INDEX

Adapted by the Human Services Design Laboratory
Case Western Reserve University
(Sept., 1973)
From the Job Descriptive Index
Developed at Bowling Green State University

This questionnaire is intended to give the researchers some information on how satisfied you are in your present employment. It asks you about the work that you do, your pay, your supervision, and your co-workers. The instructions are given on each page.

Your answers will be kept strictly confidential. Nothing will ever be released that identifies you to your employer or the Ohio Department of Mental Health.

YOUR PRESENT WORK

Think of your present work, what you do on your job. What is it like? Next to each word listed below, check the blank that best represents how you describe your job.

	NOT AT ALL	A LITTLE	SOME-WHAT	VERY MUCH	COMPLETELY
INTERESTING					
ROUTINE					
REWARDING					
BORING					
SATISFYING					
CREATIVE					
RESPECTED					
COMFORTABLE					
PLEASANT					
USEFUL					
TIRESOME					
MAKES ME FEEL GOOD					
OVERLY EXHAUSTING					
CHALLENGING					
DISCOURAGING					
REQUIRES LITTLE SKILL					
SUCCESSFUL					
GIVES A SENSE OF ACCOMPLISHMENT					

YOUR PRESENT PAY

Think of the pay that you get now. How well does each of the following statements describe your pay? Next to each statement given below, check the blank that corresponds to your opinion about the statement.

- -

	STRONGLY DISAGREE	DISAGREE	UN-DECIDED	AGREE	STRONGLY AGREE
My income is adequate for normal expenses.	_____	_____	_____	_____	_____
The fringe benefits are satisfactory.	_____	_____	_____	_____	_____
I can barely live on my income.	_____	_____	_____	_____	_____
My pay is bad.	_____	_____	_____	_____	_____
My income from working here provides several luxuries.	_____	_____	_____	_____	_____
Pay increases do not begin to keep up with the cost of living.	_____	_____	_____	_____	_____
My pay is less than I deserve	_____	_____	_____	_____	_____
I am highly paid.	_____	_____	_____	_____	_____
I am underpaid.	_____	_____	_____	_____	_____

SUPERVISION

Think of the kind of supervision that you get on your job. How much does each of the following words describe your supervision? Next to each word, check the blank that best represent how you would describe your supervision.

- -

	NOT AT ALL	A LITTLE	SOME-WHAT	VERY MUCH	COMPLETELY
ASKS MY ADVICE	_____	_____	_____	_____	_____
NOT EASILY SATISFIED	_____	_____	_____	_____	_____
NOT CONSIDERATE	_____	_____	_____	_____	_____
PRAISES MY WORK	_____	_____	_____	_____	_____
TACTFUL	_____	_____	_____	_____	_____
OFFERS USEFUL IDEAS	_____	_____	_____	_____	_____
UP-TO-DATE	_____	_____	_____	_____	_____
HELPFUL	_____	_____	_____	_____	_____
QUICK TEMPERED	_____	_____	_____	_____	_____
TELLS ME WHERE I STAND	_____	_____	_____	_____	_____
ANNOYING	_____	_____	_____	_____	_____
DOESN'T HEAR MY POINT OF VIEW	_____	_____	_____	_____	_____
KNOWS JOB	_____	_____	_____	_____	_____
INADEQUATE	_____	_____	_____	_____	_____
INTELLIGENT	_____	_____	_____	_____	_____
LET'S ME DO THINGS MY WAY	_____	_____	_____	_____	_____
AROUND WHEN NEEDED	_____	_____	_____	_____	_____
LAZY	_____	_____	_____	_____	_____

OPPORTUNITIES FOR PROMOTION

Think of the opportunities that you have for promotion. How well does each of the following statements describe your opportunities for promotion? Next to each sentence given below, check the blank that corresponds to your opinion.

- -

	STRONGLY DISAGREE	DISAGREE	UN-DECIDED	AGREE	STRONGLY AGREE
The opportunities for promotion are good here.	_____	_____	_____	_____	_____
The opportunities for promotion are somewhat limited.	_____	_____	_____	_____	_____
Promotions are based on ability.	_____	_____	_____	_____	_____
I have no future in working here.	_____	_____	_____	_____	_____
I have a good chance for promotion.	_____	_____	_____	_____	_____
The promotion system is unfair.	_____	_____	_____	_____	_____
Around here, promotions are very rare.	_____	_____	_____	_____	_____
They hire new employees rather than promote present ones.	_____	_____	_____	_____	_____
To get promoted, you need to be friends with the right people.	_____	_____	_____	_____	_____

CO-WORKERS

Think of the majority of your co-workers, those that you work with every day. How much does each of the following words describe these people? Next to each word, check the blank that best represents how you describe your co-workers.

- - - -